INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

S-E-C-R-E-T

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SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

a. Production of building materials in Poland compared with that of other countries.

8 OCT 1958

b. Requirements of the Polish building materials industry in machine tools and equipment during the period 1958 - 1965.

c. Coal consumption in the Polish building materials industry compared with consumption in the USSR

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STATE	x	ARMY	x	NAVY	x	AIR	x	FBI		AEC						

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Master Engineer Fr. TOPOLSKI.

TARGET - 10 million tons of Cement.

1. Basic building materials can be divided into two groups. The first consists of ingredients for mortar, i.e. cement, lime and gypsum: the second of building materials proper, i.e. bricks and siliceous fire bricks, slag concrete plates, prefabricated concrete and reinforced concrete, building stones, etc. During the present period and during the subsequent five year economic plan, the production of the above listed materials will be the decisive factor in the success of 25X1 building programme, this in addition to steel for construction and materials for heating and lighting installations, for roofs, windows, floors, etc.

2. 25X1 roblems connected with the production of the above mentioned two groups of the building material industry, i.e. materials for mortar and building materials proper. The table at APPENDIX I illustrates the proposed development of the production of building materials in POLAND as compared with other countries.

3. In order to fulfil plans for the development of the 25X1 building material industry in POLAND, we must modernise the existing enterprises and exploit fully their capacity; we must extend them and build new factories. This is not an easy matter since 25X1 despite the wealth of raw materials, no machine tools for the building materials industry were being manufactured. This was due to the undeveloped state of mechanical engineering industry in the period 25X1 between the two world wars. Even in the case of the cement industry, which was comparatively well developed and established on capitalist lines, there was no industry in POLAND to supply it with machine tools and equipment.

4. In general, machine tools and equipment were imported even for manufacturing ordinary bricks. Moreover, in most cases, the building

... material factories

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material factories, with the exception of those recently built, possessed antiquated equipment, often manufactured before the first world war. This equipment needs urgent replacement by a more modern and productive type, more economic to run. The table at APPENDIX II illustrates the requirements (in thousands of tons) of the Polish building material industry in machine tools and equipment during the period 1958-1965.

5. It is clear that, should there by more freedom in trade with capitalist countries than at present, the former policy of importing machine tools and equipment for [redacted] building material industry is out of the question. The most elementary economic calculation shows, in view of the enormous requirements, that the rapid development of the mechanical engineering industry adapted to the production of machine tools and equipment for the building material industry will be a necessary but paying proposition. Of the total of 116 thousand tons of machine tools and equipment to be installed in the Polish building material factories in the period 1958-1960 about 27 thousand will be imported, i.e. 23%. This percentage will be even lower in the subsequent five-year period (about 14%). 25X1

6. Bearing in mind the seriousness of the task facing [redacted] mechanical engineering industry, one must remember the part played by imported tools and equipment in fulfilling [redacted] plan. This is likely to revolutionise [redacted] building material industry from both the technical and economic points of view. The modernisation and development of this industry will depend on the import of machine tools, foreign licences to make them, and in some cases complete plants. These imports of world technical prototypes will eventually be a reserve at the disposal of [redacted] designers, technologists, and the research institutes of [redacted] industry. It will save [redacted] expensive preparatory work as it will have already been carried out by industrially developed capitalist and socialist countries. The table at APPENDIX III illustrates the disproportion between the present index of the coal consumption in [redacted] building material industry and that in the most developed European countries. 25X1 25X1 25X1 25X1 25X1 25X1

7. As regards machine tools and equipment, it should be pointed out that in these countries the index of their weight per production unit is on an average thirty per cent lower [redacted] It goes without 25X1
saying that [redacted] new industry for manufacturing machine tools and equipment 25X1
for the building material industry must be supplied with the most modern prototypes as opposed to obsolete designs. This is necessary, not only for the economy of [redacted] building industry and its subsidiaries, but also 25X1
for the planned export, which is quite realistic, of machine tools and complete building material plants. At present, to a small extent, [redacted] 25X1
[redacted] experts some "machine tools" and equipment for the building material 25X1
industry and complete equipment for slag concrete factories.

8. Following the tradition and the best achievements of the big suppliers of "machine tools" and equipment for the building material industry - such as POLYSIUM and THAELMANNWERKE in East GERMANY, PREROV Works in CZECHOSLOVAKIA, [redacted] 25X1
[redacted] only to name those best known in POLAND - it seems reasonable to 25X1
adopt the principle of appointing so-called "general contractors", who would supply complete plants for [redacted] building material industry. This 25X1
means that a State enterprise (in Socialist countries) or a capitalist firm, would supply the complete mechanical equipment and technical design for a given building material manufacturer. He would supervise its assembly and set it in motion, in line with the requirements and technical stipulation of the buyer. CZECHOSLOVAKIA and East GERMANY are at present reorganising their mechanical engineering industry for this particular purpose into big enterprises or combines assuming the role of "general contractors", both for the home and export markets. The appointment of a "general contractor" does not exclude him from sub-contracting.

9. Most general contractors, in addition to manufacturing all basic machine tools and equipment in their own enterprises, employ designers and technologists to draw up complete engineering plans and they possess research establishment laboratories for this purpose.

10. The only enterprise in POLAND equipping itself as a general contractor for the cement, lime and gypsum industry is the POMORSKIE ZAKŁADY BUDOWY MASZYN in BYDGOSZCZ (POMORZE Mechanical Engineering Works). It has already started this difficult task in earnest.

11. In order to fulfil the task of a general contractor to supply various machine tools and equipment (such as revolving and pit furnaces, mills, etc.), the present production capacity of the Works of 10-12 thousand tons of machinery needs expanding to 20-25 thousand tons. The present staff of designers and inspectors of supplies should also be increased. It will be necessary to train a considerable number of foremen and engineers in leading enterprises and industrial designing offices abroad. There is an urgent need to complete the research institute that is being built. To solve this problem, as the POMORZE Mechanical Engineering Works have no technological office, close co-operation with the Planning Bureau for the Cement and Lime Industry, subordinated to the Ministry of Building and Building Material Industry, is necessary.

12. In the field of the building material industry proper, the Central Board of Mechanical Engineering intends to play the part of the general contractor, but this should be regarded as a temporary arrangement. Here again, general contractors must be selected from enterprises which have a staff of designers and technologists capable of manufacturing complete equipment (especially brick kilns).

13. In view of the present economic incentives and of the wide political propaganda - in particular after the 11th Plenary Session of the PZPR Central Committee - in favour of the development of the production of building materials, it is necessary to consider how to satisfy the requirements of the decentralised industry that is growing much too fast. This decentralised production includes in particular accessory production of various building and industrial enterprises, and the production of industrial, peasant and private co-operatives.

14. A cautious estimate of the building materials produced by these enterprises indicates that they might increase the planned production by

10-15%, i.e. by hundreds of millions of units per annum. This is tantamount to an increase by tens of thousands of new habitable rooms per annum. Thus, there is an urgent need to make available the necessary equipment by mobilising all redundant machine tools dispersed in various enterprises and by the production of new machine tools. The need is for simple equipment for brick kilns, which is manufactured in the country and the production of which it should not be too difficult to increase.

15. Planned increases in production will be offset by as much as 10% by the availability of some redundant equipment, possibly by as much as 1500 tons a year, which presents no problem.

16. The most difficult problem, the standardisation of machine tools and the drawing up of a production programme, will be dealt with by a committee appointed for the purpose by the Ministry of Building and Building Material Industry.

17. The supply of spare parts for machine tools in operation in the building material industry is another problem. A general survey of the matter is necessary, not only to satisfy the requirements of the enterprises run by the central industrial boards subordinated to the Ministries, but also to supply thousands of small and medium enterprises controlled by national councils (through local boards), subsidiary co-operatives, etc., with spare parts.

18. In addition to the obligation on the part of the mechanical engineering industry to manufacture a definite quantity of spare parts for new machine tools, there is the need to organise the production of spare parts for machine tools now in operation. Some mechanical and engineering works, under the direct control of the Ministry of Building and Building Materials Industry, should be assigned to this purpose.

19. As a result of experience acquired in manufacturing machine tools for Public Works, the Central Board of Machine Tools and Equipment of the Ministry of Building and Building Material Industry has started to organise the supply of spare parts for the Building Material Industry by drawing up designs and beginning production.

20. The development of the building industry in POLAND, planned in our three and five year programmes, and in particular the development of residential building, as outlined in the resolution of the 11th Plenary Session of the PZPR Central Committee, entirely depends on the fulfilment of the tasks assigned to the building material industry.

21. The tasks to be fulfilled by the Ministry of Building and Building Material Industry and other Ministries concerned, when planning and organising the production and investment in this industry, need powerful support from the heavy industry. This support should include the supply of steel work, installations and machine tools, as well as the supply of modern technological equipment.

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PRODUCTION OF BUILDING MATERIALS IN POLAND AS COMPARED WITH OTHER COUNTRIES.

APPENDIX I.

MATERIAL	Units	HOME PRODUCTION 1957	1955	1957	1960 Plan	1965 Plan	PRODUCTION IN 1955 USSR	GDR	GFR	France	England	Notes
CEMENT	Millions of tons	1.3	3.8	4.5	6.85	10.4	2.9	3.0	18.8	10.7	12.7	
LIME	"		1.7	1.76	3.02	4.3			7.66			
GYPSUM AND ANALOGOUS MATERIALS	"		0.07	0.1	0.3	1.0			0.86			
TOTAL MATERIALS FOR MORTAR	"		5.57	6.36	10.17	15.7			27.32			
PRODUCTION OF MATERIALS FOR MORTAR PER INHABITANT	Kgs.		203	222	338	483			525			
PRODUCTION OF: Cement	"	38	140	157	227	320	214	162	375	249	249	
Lime	"		62	62	100	132			146			
Gypsum per inhabitant	"		24	3.5	10.0	30.8			17			
BRICKS	Millions	1848	2564	2805	5700	4300	1592 2/	1954 2/	5736		5916 1/	1/1950 2/1957
SILICEOUS FIREBRICKS	"		150	187	310	1000		300	2061			
SLAG CONCRETE	"		149	229	595	1200			240			
PREFABRICATED CONCRETE AND REINFORCED CONCRETE	"		16	404	1460	2550			4300 x/			x/including 3200 millions on pumice-stone base
OTHER BUILDING MATERIALS	"		52	95	240	550			280 xx/			xx/without pumice-stone
TOTAL BUILDING MATERIALS	"		2931	3720	6305	9600			12617 xx/			
PRODUCTION OF BUILDING MATERIALS PER INHABT.	Units	54 3/	107	130	209	296			242 xx/			3/only bricks and siliceous fire-bricks
PRODUCTION OF BRICKS PER INHABITANT	"		93	98	123	132			110			
PRODUCTION OF FIRE-BRICKS (SILICEOUS) PER INHABITANT	"		5	6	10	31			40			

THE REQUIREMENTS OF THE POLISH BUILDING MATERIAL INDUSTRY IN MACHINE TOOLS AND EQUIPMENT DURING THE PERIOD 1958-1965 (IN THOUSAND TONS).

APPENDIX II.

INDUSTRY	Years 1958-1960		Years 1961-1965		Total 1958-1965
	Total	Average per annum	Total	Average per annum	
CEMENT	43.5	14.5	62.0	12.4	105.5
LIME	7.4	2.47	26.0	5.2	33.4
GYPSUM	6.9	2.3	14.2	2.8	21.1
TOTAL MATERIALS FOR MORTAR	57.8	19.3	102.2	20.4	160.0
CERAMICS FOR BUILDING	27.8	29.3	135.2	27.0	63.0
SILICATES	7.7	2.58	9.9	1.98	17.6
SLAG CONCRETE	2.2	0.73	4.0	0.8	6.2
CONCRETE AND REINFORCED CONCRETE	14.3	4.8	30.1	6.02	44.4
OTHER MATERIALS	0.5	0.17	1.2	0.2	1.7
TOTAL BUILDING MATERIALS (PROPER)	52.5	17.5	180.4	16.0	132.9
BUILDING STONES	2.6	0.87	4.4	0.88	7.0
OTHER MINERAL MATERIALS	2.8	0.93	2.8	0.56	5.6
TOTAL BUILDING STONES AND OTHER MINERAL MATERIALS	5.4	1.8	7.2	1.4	12.6
GRAND TOTAL	115.7	38.6	189.8	37.8	305.5

APPENDIX III.

COAL CONSUMPTION IN POLISH BUILDING MATERIAL INDUSTRY

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1955.

MATERIAL	UNIT	COAL CONSUMPTION IN KG. PER UNIT	
		Poland	USSR[x]
Clinker	Tons	373	320
Lime	Tons	262.5	260
Gypsum	Tons	130	
Bricks	Thousands	338	
Siliceous Fire Bricks	Thousands	245	

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Notes: x - Estimate

1/ - Coal of heating power of 7000 calories or 30/35 kg. oil 25.95

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